North East England Aggregates Working Party

Annual Monitoring Report 2020

North East England Aggregates Working Party

Correct as of this date: 31 December 2021

AWP Chair:

Claire Teasdale, Durham County Council

AWP Secretary:

Kevin Tipple, Northumberland County Council Email: kevin.tipple@northumberland.gov.uk

Telephone: 01670 623631

Contents

Acronyms	4
Glossary	5
1. Introduction	7
Executive Summary	7
2. Mineral Planning Authorities in North East England	12
3. Primary Aggregates	14
Location of quarries, wharves and rail depots	14
Location of offshore aggregate production areas	15
Sales and Imports	16
Permitted Reserves	20
Landbank in North East England	23
4. Secondary and Recycled Aggregates	25
5. Development Plans and Mineral Policies in North East England	27
6. Aggregates sites and planning applications in North East England	30
Aggregates sites	30
Planning Applications	33
7. Local Aggregate Assessments	34
Local and National Aggregate Need	35
8. Trends and Analysis	36
Major Construction Projects or Developments	38
Key Conclusions	40
Appendix 1: AWP Meetings	41
Appendix 2: Sales and Reserves of Primary Aggregates by Resource and End Use	43
Appendix 3: Crown Estate Landings Statistics	45
Appendix 4: North East England AWP Membership	46

Acronyms

AWP Aggregate Working Party

BAA British Aggregates Association

BGS British Geological Survey

BMAPA British Marine Aggregate Producers Association

CDEW Construction, Demolition and Excavation Waste

DLUHC Department for Levelling Up, Housing and Communities

MHCLG Ministry of Housing, Communities and Local Government (now the

Department for Levelling Up, Housing and Communities)

MPA Mineral Products Association

NPPF National Planning Policy Framework

SOCG Statement of Common Ground

Glossary

Active site A quarry or wharf that is in production, including from stockpiles,

for some time during the survey year.

Aggregates Aggregates are defined as being hard, granular materials which

are suitable for use either on their own or with the addition of cement, lime or a bituminous binder in construction. The most important applications for aggregates include concrete, mortar, roadstone, asphalt, railway ballast, drainage courses and bulk

fill.

Core Strategy Development Plan Document setting out the spatial vision and

strategic objectives of the planning framework for an area.

Development Plan The complete set of policies and proposals for the development

and use of land and buildings in an area. This includes adopted Local Plans and neighbourhood plans, and is defined in section

38 of the Planning and Compulsory Purchase Act 2004.

Dormant site As defined under the Environment Act 1995, sites where

planning permission was granted between 21 July 1943 and 22 February 1982, but where no minerals development was carried out to any substantial extent at the site in the period between 22 February 1982 and 6 June 1995. Extraction cannot recommence at a dormant site until appropriate modern planning conditions have been submitted to and agreed by the Mineral Planning

Authority.

Duty to Cooperate Collaborative working with adjoining authorities, and other public

bodies, regarding strategic issues which may have significant cross boundary impacts, during the preparation of Local Plans.

Inactive site A quarry or wharf that is not in production, including from

stockpiles, during the survey year. It includes both sites worked in the past and still containing permitted reserves and sites where planning permission has been received, but have yet to

be worked.

Landbanks The stock of mineral reserves with valid planning permissions

for their extraction but where their extraction has yet to take place. The length of the aggregate landbank is the sum in tonnes of all permitted reserves for which valid planning permissions are extant, divided by the annual rate of future

demand based on the latest annual Local Aggregate

Assessment. The landbank is usually calculated at a mineral

planning authority level.

Local Aggregate Assessment

An annual assessment of the demand for and supply of aggregates in a mineral planning authority's area.

Local Plan

A plan for the future development of a local area, drawn up by the local planning authority in consultation with the community. In law this is described as the development plan documents adopted under the Planning and Compulsory Purchase Act 2004. A local plan can consist of either strategic or non-strategic policies, or a combination of the two.

LAA Aggregates Provision Rate

The annual rates of provision for aggregates as detailed in the Local Aggregate Assessment which planning authorities should use as an indicator of how much should be planned for in their area.

Minerals Plan / Minerals Local Plan

A specialist type of Local Plan for those planning authorities with responsibilities for minerals planning, which set of a framework for decisions involving minerals development.

National and Sub-National Guidelines

An indication of the total amount of aggregate provision that the mineral planning authorities, collectively within each Aggregate Working Party, should aim to provide.

Permitted reserves

In land use planning terms, reserves are those minerals that have planning permission for extraction. It includes reserves at active and inactive quarries but does not include reserves at dormant sites or sites that have not been granted planning permission. Permitted reserves are included in the landbank calculations.

Primary aggregates

Naturally occurring mineral deposits, extracted specifically for use as aggregates and are used for the first time. Most primary aggregates are produced from hard, strong rock formations by crushing to produce crushed rock aggregate or from naturally occurring particulate deposits such as sand and gravel.

Recycled aggregates

Produced from various sources including the demolition or construction of buildings and structures or from asphalt planings as a result of work to resurface roads and from railway track ballast. Recycling involves the processing of the waste material so that it can be made into new materials for aggregate use.

Secondary aggregates

Aggregates obtained as a by-product of other mining or quarrying operations or aggregates obtained as a by-product of other industrial processes.

Statement of common ground

A written record of the progress made by strategic policy-making authorities during the process of planning for strategic cross-boundary matters. For minerals plans, aggregate working parties are also expected to be treated as additional signatories.

1. Introduction

Executive Summary

North East England Aggregates Working Party

The North East England Aggregates Working Party is one of a number of similar working parties throughout England and Wales originally established in the 1970s to collect data and monitor the production and supply of aggregate minerals, the reserves of aggregate minerals covered by valid planning permissions and provide technical advice on the supply and demand for aggregates from their areas. The aggregates working parties are a joint local government, central government and industry body. Funding for the secretariat is provided by the Department for Levelling Up, Housing and Communities but the members of the Aggregates Working Party provide their time on a voluntary basis. There are thirteen mineral planning authorities in the North East England Aggregates Working Party cluster (see Figure 1). This includes seven unitary authorities, five metropolitan borough authorities and one national park authority in four sub-regional clusters:

- County Durham (Durham County Council);
- Northumberland (Northumberland County Council and Northumberland National Park Authority);
- Tees Valley (Darlington Borough Council, Hartlepool Borough Council, Middlesbrough Council, Redcar and Cleveland Borough Council and Stockton on Tees Borough Council); and
- Tyne and Wear (Gateshead Council, Newcastle City Council, North Tyneside Council, South Tyneside Council and Sunderland City Council).

Annual Monitoring Report 2020

This report presents updated information for North East England on:

- Sales of primary aggregates in 2020;
- Permitted reserves of primary aggregates as at 31 December 2020;
- Quantity of aggregate minerals granted and refused planning permission in 2020 or subject to planning applications pending determination;
- Production and use of recycled and secondary aggregates in 2020;
- Quarries and wharves in North East England and their operational status in 2020;

- Local Aggregates Assessments;
- Status and an update of progress with the preparation of development plans applicable to minerals; and
- Major construction projects or developments that may be significant in terms of demand for aggregate minerals from the region.

Detailed information from the previous surveys covering North East England can be found in the earlier annual reports produced by the North East England Aggregates Working Party. The survey for 2019 was part of a more comprehensive national survey (Aggregate Minerals Survey 2019 – AM2019) that is usually undertaken every four or five years by Government. The aim of the survey was to provide an in-depth and up-to-date understanding of regional and national sales, inter-regional flows, transportation, consumption, and permitted reserves of primary aggregates. A report collating the results of the national survey is available to view on the gov.uk website.

Sales of Primary Aggregates

- During 2020 sales of primary aggregates from North East England decreased from 7.2 million tonnes in 2019 to 6.5 million tonnes in 2020. Sales in 2020 were below both the three year sales and ten year sales averages.
- This decrease in sales for 2020 compared to 2019 is considered to be principally a
 result of the restrictions to control the Coronavirus pandemic, which saw the
 temporary closure of many construction sites during 2020. Prior to 2020 there had
 been a general increase in sales, particularly from 2013 onwards.
- Sales of land-won sand and gravel for aggregates uses decreased from 1.2 million tonnes in 2019 to 0.99 million tonnes in 2020. In Northumberland the three year sales average is below the ten year sales average reflecting a decrease in sales from 2017. It is considered that this reflects a reduction in the number of operational sites in Northumberland over this period and sites beginning to work out their permitted reserves, which has had a consequential impact on productive capacity. In County Durham, there has been a notable increase in sales since 2016 and 2017 with this increase being principally due to production at Low Harperley Quarry commencing form 2017 onwards and increased production of sand at Quarrington Quarry.
- Sales of crushed rock for aggregates used decreased from 5.47 million tonnes in 2019 to 4.95 million tonnes in 2020.
- Sales of marine dredged sand and gravel decreased from 0.63 million tonnes in 2019 to 0.58 million tonnes 2020.

 In addition, just less than 117,000 tonnes of crushed rock was imported by sea via wharves in North East England in 2020. This material was sourced from Norway and Scotland.

Reserves of Primary Aggregates

- Reserves of sand and gravel for aggregate uses decreased from 16.8 million tonnes in 2019 to 15.3 million tonnes in 2020. This decrease in permitted reserves was as a result of sales in 2020, no new planning permissions being granted in 2020, and a reassessment of reserves at a quarry in Northumberland by the operator.
- Reserves of crushed rock for aggregate uses decreased from 198.0 million tonnes in 2019 to 195.3 million tonnes in 2020. This decrease was as a result of sales in 2020 and no new planning permissions being granted in 2020.
- The permitted reserves recorded in 2020 for both crushed rock and sand and gravel
 were the lowest in the last ten monitoring periods and reflect a pattern of decreasing
 reserves in North East England since 2015. This is considered to be due to a
 combination of sales being at a higher level that new reserves granted planning
 permission over this period and some downward reassessment of permitted
 reserves at some sites.

Secondary and Recycled Aggregates

- In 2020 it is estimated that fixed construction and demolition recycling facilities and secondary aggregates producers contributed 841,300 tonnes of recycled and secondary aggregate to supply from North East England.
- Sources of recycled and secondary aggregates included construction, demolition and excavation wastes, spent road planings, and ash from the Haverton Hill Energy from Waste Plant on Teesside.
- This recycled and secondary aggregates sales figure should be treated with some degree of caution as not all producers in North East England responded to the survey and the figures include a large number estimates of production from some sites derived from the Environment Agency Waste Data Interrogator. In addition, the survey does not include mobile crushers and screens which are known to make a significant contribution in terms of the quantities of construction and demolition waste recycled for aggregate uses. Further work is required to understand more clearly the proportion of supply this contributes but it is thought that this could be an additional 20% to that produced at fixed sites.

Local Aggregates Assessments and North East England's contribution to local and national need

In North East England, the Mineral Planning Authorities in County Durham, Northumberland and Tyne and Wear have worked together to produce a Joint Local Aggregate Assessment and the five Tees Valley authorities have also worked together to produce a Joint Tees Valley Local Aggregate Assessment.

For the Mineral Planning Authorities in County Durham, Northumberland and Tyne and Wear, the provision has been based on a three year sales average over the period 2017 to 2019 recognising the increase in demand in recent years compared to the period pre-2013 and the impact of the restrictions to control the Coronavirus pandemic on sales in 2020. In Tees Valley the level of provision is as set out in the Tees Valley Joint Minerals and Waste Core Strategy (adopted September 2011). The Local Aggregate Assessments make combined provision for 5.5 million tonnes of crushed rock per annum and 1.18 million tonnes of sand and gravel per annum.

When compared with the ten year sales averages, the combined provision in the Local Aggregates Assessments has been found to exceed the ten sales averages for both crushed rock and sand and gravel. When compared with the annual equivalent of the published sub-national guidelines for North East England, the combined provision in the LAAs is below the guidelines for both sand and gravel and crushed rock. In respect to the current national and sub-national guidelines for aggregates provision, the North East England Aggregates Working Party considers these are now out-of-date and do not represent a robust basis for assessing whether North East England and its mineral planning authorities are making an appropriate contribution to local and wider needs. The North East Aggregates Working Party additionally considers that the guidelines are now in need of review.

On this basis the North East England Aggregates Working Party considers that the Local Aggregates Assessments are making an appropriate contribution to local and wider needs to ensure a steady and adequate supply of these materials. There is no undue reliance on other areas to meet needs within North East England. The Aggregate Minerals Survey 2019 reported sales of primary aggregates from North East England were 7.3 million tonnes and consumption was 7.5 million tonnes. Notwithstanding this it is recognised there may be supply issues at a mineral planning authority level in future years as permitted reserves are worked out and existing planning permissions expire. It is therefore important to ensure that there are appropriate levels of permitted reserves and productive capacity to maintain supply in order to meet both local and national needs.

Table 1 Dashboard key data summary

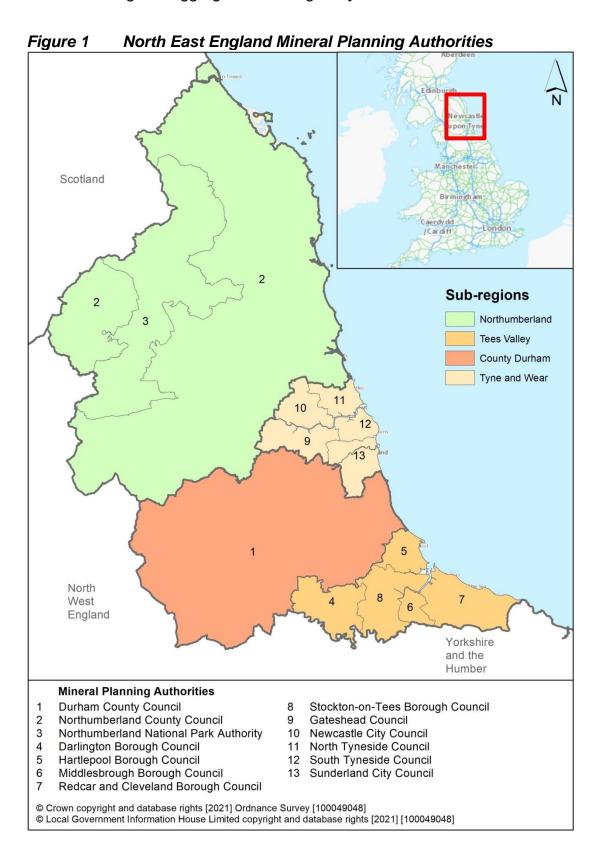
Aggregate	Sales in 2020 (thousand tonnes)	Change in sales from previous year	10 year sales average (thousand tonnes)	3 year sales average (thousand tonnes)	Sales Trend	LAA annual provision (thousand tonnes)	Permitted reserves at 31 December 2020 (thousand tonnes)	Change in permitted reserves from previous year	Landbank of permitted reserves (years)	Change in Landbank from previous years
Sand and Gravel	994	\	924	1,076	↑	1,181	15,261	V	12.9	\
Crushed Rock	4,949	V	4,519	5,384	↑	5,498	195,348	V	35.5	\
Marine sand and gravel	582	\	535	580	↑	N/A	N/A	N/A	N/A	N/A
Total Primary Aggregates	6,525	\	5,979	7,040	↑	6,679	210,609	\	31.5	\
Recycled and Secondary Aggregates	841	\	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

2. Mineral Planning Authorities in North East England

The North East England Aggregates Working Party cluster covers around 850,000 hectares between the Scottish Borders to the north, Cumbria and North West England to the west, Yorkshire to south and the North Sea to the east. The area has a population of over 2.5 million, primarily concentrated in the two conurbations of Tyne and Wear and Tees Valley. The remainder of North England is mostly rural in character and sparsely populated.

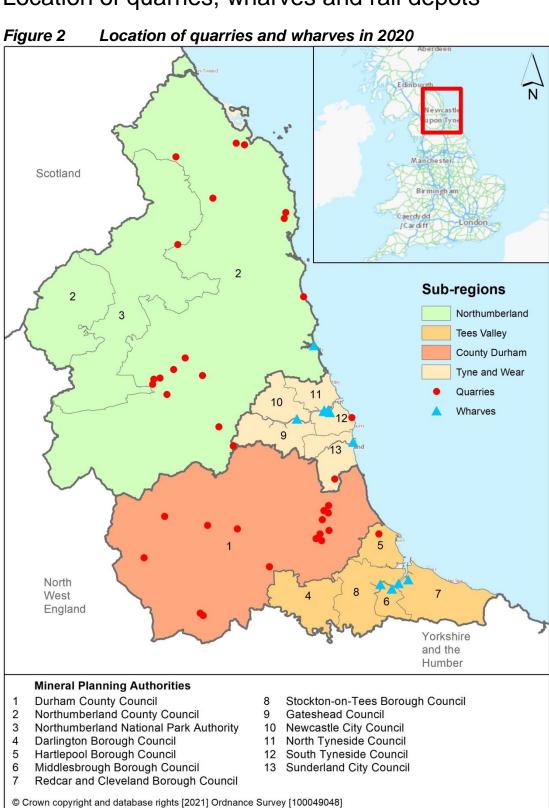
There are thirteen mineral planning authorities in the North East England Aggregates Working Party cluster (see Figure 1 below). This includes seven unitary authorities, five metropolitan borough authorities and one national park authority in four sub-regional clusters:

- County Durham (Durham County Council);
- Northumberland (Northumberland County Council and Northumberland National Park Authority);
- Tees Valley (Darlington Borough Council, Hartlepool Borough Council, Middlesbrough Council, Redcar and Cleveland Borough Council and Stockton on Tees Borough Council); and
- Tyne and Wear (Gateshead Council, Newcastle City Council, North Tyneside Council, South Tyneside Council and Sunderland City Council).



3. Primary Aggregates

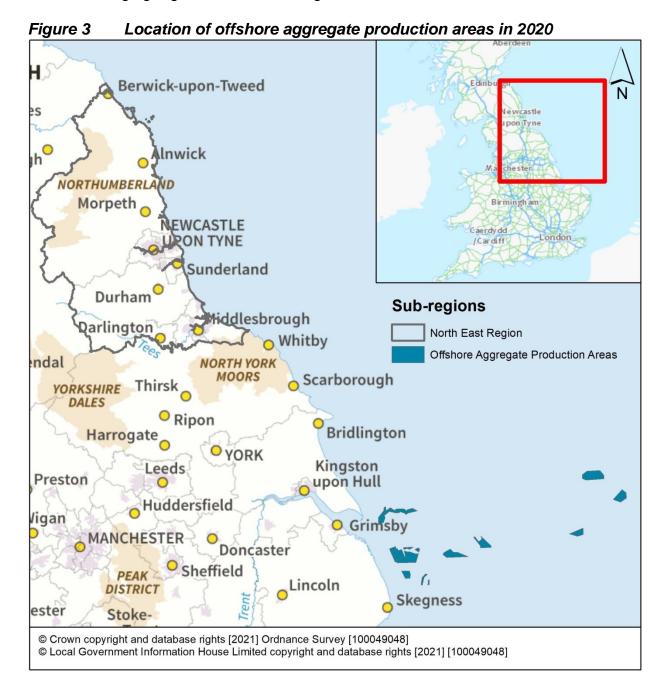
Location of quarries, wharves and rail depots



© Local Government Information House Limited copyright and database rights [2021] [100049048]

Location of offshore aggregate production areas

In 2020 the marine dredged sand and gravel delivered to landing locations in North East England was sourced from licenced dredging areas in the Humber dredging region off the coast of Yorkshire and Lincolnshire. The locations of the licenced dredging areas in the Humber dredging region are shown in Figure 3.



Sales and Imports

Information on sales of primary aggregates from quarries in North East England is provided in Table 2. This includes a breakdown of sales of crushed rock and sand and gravel for aggregates uses from quarries in North East England. It also includes sales marine dredged sand and gravel landed at wharves in North East England and crushed rock imported by sea landed at wharves in North East England.

In 2020 total primary aggregate sales from North East England were 6.53 million tonnes. This was made up of 0.99 million tonnes of land won sand and gravel, 4.95 million tonnes of crushed rock and 0.58 million tonnes of marine sand and gravel. The survey also recorded an additional contribution of 116,700 tonnes from crushed rock imported by sea to North East England in 2020.

Sales of primary aggregates from quarries and wharves in North East England in 2020 were lower than the sales recorded during 2019. The decrease in sales from 2019 to 2020 is considered to be a result of the restrictions to control the Coronavirus pandemic in 2020, which led construction sites and some operational quarries temporarily closing for a period from March 2020. Prior to 2020 sales had generally been increasing over the period since 2011 when lower sales were recorded a result of the 2007 economic downturn and a resulting reduction in demand for primary aggregates. In that period sales increased by 53% from 2013 (3.6 million tonnes) to 2019 (5.5 million tonnes) reflecting growth in construction activity over this period. County Durham and Northumberland continue to supply a significant proportion of land-won sand and gravel and crushed rock sales from North East England.

At a local level, sales for crushed rock and sand and gravel have generally followed the pattern of sales observed across North East England as a whole, with the three year sales averages being above the ten year average reflecting this increase in sales. However, in respect to sand and gravel sales from quarries, the three year sales average from Northumberland is below the ten year sales average reflecting a decrease in sales after 2017. It is considered that this reflects a reduction in the number of operational sites and associated reduction in production capacity in Northumberland over this period and sites beginning to work out their permitted reserves. In County Durham, there has been a notable increase in sand and gravel sales from quarries this area over the ten year period and since 2016 and 2017 (330,000 tonnes in 2017 compared with 625,000 tonnes in 2019). This increase is principally due to production at Low Harperley Quarry commencing from 2017 onwards and increased production of sand at Quarrington Quarry.

Sales of marine dredged sand and gravel from wharves in North East England have similarly increased over the ten year period, but sales have not increased at the same levels as those from the quarries. This is considered to be due previously active wharves currently being inactive. Imports of crushed rock by sea continue to make a small contribution to overall sales of crushed rock for aggregate uses from North East England.

Table 2 Primary Aggregate Sales and Imports in North East England

rabio 2 rimary rigg	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	10 year average	3 year average
Sand and Gravel												
Durham	237	199	218	276	256	322	330	446	625	485	339.4	518.7
Northumberland County	450	349	320	361	420	436	405	352	312	276	368.1	313.3
Northumberland National Park	0	0	0	0	0	0	0	0	0	0	0	0
Darlington	0	0	0	0	0	0	0	0	0	0	0	0
Hartlepool	С	0	0	0	0	0	0	0	0	0	0	0
Middlesbrough	0	0	0	0	0	0	0	0	0	0	0	0
Redcar and Cleveland	0	0	0	0	0	0	0	0	0	0	0	0
Stockton on Tees	0	0	0	0	0	0	0	0	0	0	0	0
Gateshead	0	0	0	0	0	0	0	0	0	0	0	0
Newcastle	0	0	0	0	0	0	0	0	0	0	0	0
North Tyneside	0	0	0	0	0	0	0	0	0	0	0	0
South Tyneside	0	0	0	0	0	0	0	0	0	0	0	0
Sunderland	С	С	С	С	С	С	С	С	С	С	С	С
Total sand and gravel sales	869	713	716	873	917	972	955	1,047	1,187	994	924.3	1,076.0
Crushed Rock												
Durham	1,955	1,696	2,245	2,654	2,770	2,990	2,636	3,484	3,168	2,530	2,612.8	3,060.7
Northumberland County	1,230	1,233	1,060	1,171	1,473	1,708	1,768	1,641	1,742	1,861	1,488.7	1,748.0
Northumberland National Park	С	С	С	С	С	С	С	С	С	С	С	С
Darlington	0	0	0	0	0	0	0	0	0	0	0	0
Hartlepool	С	С	С	С	С	С	С	С	С	С	0	0
Middlesbrough	0	0	0	0	0	0	0	0	0	0	0	0
Redcar and Cleveland	0	0	0	0	0	0	0	0	0	0	0	0
Stockton on Tees	0	0	0	0	0	0	0	0	0	0	0	0
Gateshead	0	0	0	0	0	0	0	0	0	0	0	0
Newcastle	0	0	0	0	0	0	0	0	0	0	0	0
North Tyneside	0	0	0	0	0	0	0	0	0	0	0	0
South Tyneside	С	С	С	С	С	С	С	С	С	С	С	С
Sunderland	С	С	С	С	С	С	С	С	С	С	С	С
Total crushed rock sales	3,433	3,181	3,569	4,162	4,533	5,356	4,808	5,735	5,468	4,949	4,519.4	5,384.0

North East England Aggregates Working Party

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	10 year average	3 year average
Marine Sand and Gravel												
Durham	0	0	0	0	0	0	0	0	0	0	0	0
Northumberland County	0	0	С	С	С	С	С	С	С	С	С	С
Northumberland National Park	0	0	0	0	0	0	0	0	0	0	0	0
Darlington	0	0	0	0	0	0	0	0	0	0	0	0
Hartlepool	0	0	0	0	0	0	0	0	0	0	0	0
Middlesbrough	С	С	С	С	С	С	С	С	С	С	С	С
Redcar and Cleveland	0	0	0	0	0	0	0	0	С	С	С	С
Stockton on Tees	С	0	0	0	0	0	0	0	0	0	0	0
Gateshead	0	0	0	0	0	0	0	0	0	0	0	0
Newcastle	0	0	0	0	0	0	0	0	0	0	0	0
North Tyneside	С	С	С	0	0	0	0	0	0	0	0	0
South Tyneside	С	С	С	С	С	С	С	С	С	С	С	С
Sunderland	С	С	С	С	С	0	0	0	0	0	0	0
Total Marine Sand and Gravel Sales	509	491	451	537	595	499	535	525	633	582	535.7	580.0
Total Aggregate Sales	4,811	4,385	4,736	5,572	6,045	6,827	6,298	7,307	7,288	6,525	5,979.4	7,040.0
Imports of crushed rock by sea	a (from o	utside of	England	and Wal	es)							
Durham	0	0	0	0	0	0	0	0	0	0	0	0
Northumberland County	0	0	С	С	С	0	0	0	0	0	С	С
Northumberland National Park	0	0	0	0	0	0	0	0	0	0	0	0
Darlington	0	0	0	0	0	0	0	0	0	0	0	0
Hartlepool	0	0	0	0	0	0	0	0	0	0	0	0
Middlesbrough	0	0	0	0	0	0	0	0	0	0	0	0
Redcar and Cleveland	0	0	0	0	0	0	0	0	С	С	С	С
Stockton on Tees	0	0	0	0	0	0	0	0	0	0	0	0
Gateshead	0	0	0	0	0	0	0	0	0	0	0	0
Newcastle	0	0	0	0	0	0	0	0	0	0	0	0
North Tyneside	0	0	0	0	0	С	С	С	С	0	0	0
South Tyneside	0	0	0	0	0	С	0	0	С	С	С	С
		+	С			0	0	0	0	0	+	

North East England Aggregates Working Party

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	10 year average	3 year average
Total Imports	75	73	160	148	145	246	98	107	244	117	141.3	156

Notes:
Figures in thousand tonnes
c = confidential figure

Permitted Reserves

The permitted reserves of crushed rock and sand and gravel for aggregate uses at quarries in North East England as at 31 December 2020 are set out in Table 3(a) and Table 3(b). Permitted reserves recorded on an annual basis from 2011 to 2020 are also detailed for these resources.

The permitted reserves of crushed rock for aggregate uses in site in North East England at 31 December 2020 were 195.3 million tonnes. This represents a decrease in permitted reserves from 198 million tonnes in 2019. A large proportion of the permitted reserves of crushed rock in North East England are found at quarries in County Durham (56%) and Northumberland (40%), with the remaining reserves found at the quarries in Hartlepool, South Tyneside and Sunderland (4%).

The permitted reserves of sand and gravel for aggregate use in North East England at 31 December 2020 were 15.2 million tonnes. The decrease in reserves from 2019 to 2020 is not in line with sales and this is most significantly as a result of a reassessment of the permitted reserves at Wooperton Quarry in Northumberland by the site operator. A large proportion of the permitted reserves of crushed rock in North East England are found at quarries in County Durham, Northumberland and a single quarry in Sunderland.

Tables 3(a) and 3(b) also show that there has been a general decline in permitted reserves of sand and gravel at quarries in North East England since 2015 with the reserves in 2020 being the lowest recorded over the ten year period since 2011. This is largely due to a combination of a drawdown on reserves as a result of sales that have been at a greater rate than new planning permissions over this period and some downward reassessment of reserves by some site operators.

North East England Aggregates Working Party

Table 3(a) Permitted Reserves in North East England – Sand and Gravel

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Durham	4,607	6,679	8,924	8,651	8,354	7,610	7,113	6,474	5,600	5,247
Northumberland County	8,969	8,331	7,728	7,414	7,337	6,045	5,410	5,104	5,585	4,594
Northumberland National Park	0	0	0	0	0	0	0	0	0	0
Darlington	0	0	0	0	0	0	0	0	0	0
Hartlepool	0	0	0	0	0	0	0	0	0	0
Middlesbrough	0	0	0	0	0	0	0	0	0	0
Redcar and Cleveland	0	0	0	0	0	0	0	0	0	0
Stockton on Tees	0	0	0	0	0	0	0	0	0	0
Gateshead	0	0	0	0	0	0	0	0	0	0
Newcastle	0	0	0	0	0	0	0	0	0	0
North Tyneside	0	0	0	0	0	0	0	0	0	0
South Tyneside	0	0	0	0	0	0	0	0	0	0
Sunderland	С	С	С	С	С	С	С	С	С	С
Total Sand and Gravel Permitted Reserves	16,173	17,551	20,220	18,198	23,571	21,315	19,956	18,752	16,830	15,261

Notes:

c = confidential figure Figures in thousand tonnes

North East England Aggregates Working Party

Table 3(b) Permitted Reserves in North East England – Crushed rock

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Durham	136,734	134,065	140,732	138,346	138,326	131,390	130,745	122,259	111,060	109,671
Northumberland County	78,004	77,264	76,643	77,972	83,991	82,917	81,016	78,520	80,070	78,681
Northumberland National Park	C*									
Darlington	0	0	0	0	0	0	0	0	0	0
Hartlepool	C+									
Middlesbrough	0	0	0	0	0	0	0	0	0	0
Redcar and Cleveland	0	0	0	0	0	0	0	0	0	0
Stockton on Tees	0	0	0	0	0	0	0	0	0	0
Gateshead	0	0	0	0	0	0	0	0	0	0
Newcastle	0	0	0	0	0	0	0	0	0	0
North Tyneside	0	0	0	0	0	0	0	0	0	0
South Tyneside	C+									
Sunderland	C+									
Total Crushed Rock Permitted Reserves	218,249	214,528	220,373	219,117	230,950	222,482	220,668	209,224	198,033	195,348

Notes:

Figures in thousand tonnes

c* = Confidential figure. Crushed rock reserves for Northumberland National Park are included in the figure for Northumberland County Council.

c+ = Confidential figure. Crushed rock reserves for Hartlepool, South Tyneside and Sunderland are included in the figure for total crushed rock reserves in North East England.

Landbank in North East England

Landbanks of aggregate mineral reserves are principally a monitoring tool to provide a mineral planning authority with early warning of possible disruption to the provision of an adequate and steady supply of land-won aggregates in their particular area.

In planning for a steady and adequate supply of aggregates, mineral planning authorities should use the landbank principally as an indicator of the security of aggregate minerals supply, and to indicate the additional provision that needs to be made for new aggregate extraction and alternative supplies in mineral plans (NPPF, Paragraph 213e). The NPPF specifies that landbanks of at least 7 years should be maintained for sand and gravel and landbanks of at least 10 years should be maintained for crushed rock (NPPF, Paragraph 213f).

The landbank of permitted reserves for sand and gravel and crushed rock in North East England at 31 December 2020 are shown in Table 4. The landbanks have been calculated using both the provision set out in the most up-to-date Local Aggregates Assessments for the relevant mineral planning authorities. For North East England as a whole, a landbank of 12.6 years has been calculated for sand and gravel and 35.1 years for crushed rock.

For some areas of North East England the mineral planning authorities have joint landbanks. Northumberland County Council and Northumberland National Park Authority have joint landbanks for the Northumberland sub-area, and both the five Tees Valley authorities and the five Tyne and Wear authorities have joint landbanks for their respective sub-areas. This is due to there being a limited number of sites in some of the individual mineral planning authority areas which means reserves data has to be combined with that from other areas to avoid disclosing commercially sensitive data for individual sites. In the case of the Tees Valley authorities this also reflects the joint working arrangements for the minerals plan between these five mineral planning authorities.

For sand and gravel, Durham had a landbank of 12.0 years at 31 December 2020 and Northumberland (covering Northumberland County and Northumberland National Park) had a landbank 12.9 years at 31 December 2020. In respect of Tyne and Wear, the reserve and landbank information cannot be published in this report as it would result in the disclosure of commercially sensitive data from the single site in this area, but the relevant Local Aggregates Assessment estimates there are 5.4 million tonnes of permitted reserves which equates to a landbank of 22.9 years at 31 December 2020. Within Tees Valley there are currently no quarries with a valid planning permission to extract sand and gravel for aggregate uses.

For crushed rock, Durham had a landbank of 35.1 years at 31 December 2020 and Northumberland had a landbank 45.8 years at 31 December 2020. There is only a single crushed rock producing quarry in the Tees Valley (located in Hartlepool Borough) and only two in Tyne and Wear (one in South Tyneside and one in Sunderland) so the reserve and landbank information for these areas cannot be published in this report as it would result in the disclosure of commercially sensitive data. The Local Aggregates Assessment covering Tyne and Wear does however estimate there are 5.9 million tonnes of permitted crushed rock reserves at the two sites which equates to a landbank of 11.8 years at 31 December 2020.

Table 4 Landbank in North East England

		East England		_	-
Mineral	Annual rate of future demand based on the latest annual Local Aggregate Assessment (tonnes)	LAA Rate is 10 years sales average	Annual Rate of future demand based on 10 years sales average (tonnes)	Reserves as at 31 December 2020 (tonnes)	Landbank in years (as at 31 December 2020)
Sand and Gravel					
Durham	438,000	No	339,400	5,247,000	12.0
Northumberland County and Northumberland National Park	356,000	No	368,100	4,594,419	12.9
Darlington, Hartlepool, Middlesbrough, Redcar and Cleveland, and Stockton on Tees	175,000	No	0	0	0.0
Gateshead, Newcastle, North Tyneside, South Tyneside, and Sunderland	240,000	No	Confidential figure	Confidential figure	-
Total Sand and Gravel	1,209,000	-	924,300	15,261,419	12.6
Crushed Rock					
Durham	3,125,000	No	2,616,400	109,671,170	35.1
Northumberland County and Northumberland National Park	1,717,000	No	1,488,900	78,680,669	45.8
Darlington, Hartlepool, Middlesbrough, Redcar and Cleveland, and Stockton on Tees	187,500	No	Confidential figure	Confidential figure	-
Gateshead, Newcastle, North Tyneside, South Tyneside, and Sunderland	468,000	No	Confidential figure	Confidential figure	-
Total Crushed Rock	5,497,500	-	4,523,200	195,348,173	35.5

4. Secondary and Recycled Aggregates

In North East England, recycled aggregates are produced primarily from materials sourced from construction and demolition wastes but also include sources such as bituminous materials from road planings.

Secondary aggregates are produced from industrial by-products, including pulverised fuel ash and furnace bottom ash. Historically secondary aggregates have been produced from the Energy from Waste Plant at Haverton Hill on Teesside, the Redcar Steelworks site on Teesside and at Lynemouth Power Station in Northumberland. Following the closure of the Redcar Steelworks the use of slag to produce a secondary aggregate has now ceased. Secondary aggregates have not been produced from the Lynemouth Power Station site since 2016 but a planning permission does allow for the extraction of ash for aggregate uses until 2027 with 50 loaded lorries permitted to leave the site each day.

The 2020 aggregates monitoring survey collected data on sales of recycled and secondary materials for aggregate use. This involved surveying the operators of fixed construction and demolition recycling sites, and secondary aggregate producers in North East England. For the sites producing recycled aggregates that did not provide a return to the survey, estimates of production in 2020 have been derived from the Waste Data Interrogator published by the Environment Agency¹.

The figures for the production of recycled and secondary aggregates in North East England presented in Table 5 should be treated with a degree of caution. The figures do not include production from mobile crushers and screens which are known to make a significant contribution in terms of the quantities of construction and demolition waste recycled for aggregate uses. Further work is required to understand more clearly the proportion of supply this contributes but it is thought that this could be an additional 20% to that produced at fixed sites. As explained above, the figures also include estimates of production from those fixed sites where survey returns have not been received and the method to derive estimated figures from the Environment Agency's Waste Data Interrogator make assumptions that certain materials have utilised to produce recycled aggregates.

25

¹ Estimates of recycled aggregate production using the Environment Agency's Waste Data Interrogator were derived through identifying sites that were receiving waste materials that could potentially be used for recycled aggregates; specifically the EWC sub-chapter waste types of 'Concrete, bricks, tiles and ceramics,' 'Bituminous materials' and 'Other construction and demolition wastes'. Total tonnages of these types of waste received at each site were calculated. Tonnages of these types which were removed from each site were subtracted, as were materials whose fate was not specified as recovery to produce a final total for each site.

Table 5 Sales of recycled and secondary aggregates in North East England, 2020

	County Durham	Northumber -land	Tees Valley	Tyne and Wear	North East England
Recycled aggregates					
Construction, demolition and excavation wastes*	122.8	68.6	126.5	258.3	576.2
Road planings / bituminous materials**	0.7	21.0	6.7	39.0	78.9
Secondary aggregates					
Incinerator Bottom Ash (Energy from Waste)	0.0	0.0	149.6	0.0	149.6
Pulverised Fuel Ash	0.0	0.0	0.0	0.0	0.0
Slag from steel production	0.0	0.0	0.0	0.0	0.0
Total	135.0	89.6	319.4	297.3	841.3

Notes:

Figures in thousand tonnes

^{*} Includes estimates of production derived from the Environment Agency Waste Data Interrogator comprising EWC sub-chapters 'Concrete, bricks, tiles and ceramics' and 'Other construction and demolition wastes' and survey returns where aggregates were identified as originating from construction, excavation and demolition wastes.

^{**} Includes estimates of production derived from the Environment Agency Waste Data Interrogator comprising EWC sub chapter 'Bituminous materials' and survey returns where aggregates were identified as originating from road planings

5. Development Plans and Mineral Policies in North East England

Local Planning Authorities are required to prepare 'Local Plans' for their areas, which set out the planning policies to guide and assess development proposals. This includes policies for minerals development prepared by these authorities in their role as a Mineral Planning Authority. The status and progress with the preparation of relevant local development plan documents in North East England is summarised in Table 6 and discussed in more detail below.

Table 6 Minerals Plans Information

Mineral Planning	Plan Name/Mineral	Preparation stage /	Status in previous annual monitoring report
Authority / Authorities	DPD	Current Status	
Durham County Council	County Durham Plan	Adopted October 2020	
	Minerals and Waste Policies and Allocations	Draft Plan September 2021	Preparation commenced
Northumberland County Council	Northumberland Local Plan	Examination (Submitted May 2019; Main Modifications June 2021)	Ongoing examination
Northumberland National Park Authority	Northumberland National Park Local Plan	Adopted July 2020	
Darlington, Hartlepool, Middlesbrough, Redcar and Cleveland, and Stockton on Tees Borough Councils	Tees Valley Joint Minerals and Waste Core Strategy and Tees Valley Joint Minerals and Waste Policies and Sites	Adopted 2011	
Gateshead Council	Core Strategy and Urban Core Plan for Gateshead and Newcastle upon Tyne	Adopted March 2015	
	Making Spaces for Growing Places (Site Allocations and Development	Adopted February 2021	

Mineral Planning Authority / Authorities	Plan Name/Mineral DPD	Preparation stage / Current Status	Status in previous annual monitoring report
	Management Policies)		
Newcastle City Council	Core Strategy and Urban Core Plan for Gateshead and Newcastle upon Tyne	Adopted March 2015	
	Development and Allocations Plan	Adopted June 2020	
North Tyneside Council	North Tyneside Local Plan	Adopted July 2017	
South Tyneside Council	South Tyneside Local Plan	Draft Plan August 2019	
Sunderland City Council	Core Strategy and Development Plan	Adopted January 2020	
	Allocations and Designations Plan	Draft Plan December 2020	

- Darlington, Hartlepool, Middlesbrough, Redcar and Cleveland, and Stockton on Tees Councils have produced Joint Minerals and Waste Development Plan Documents for the Tees Valley area. The Tees Valley Joint Minerals and Waste Core Strategy Development Plan Document and the Tees Valley Joint Minerals and Waste Policies and Sites Development Plan Document were adopted in September 2011. There are currently no formal proposals to undertake a review of these documents.
- Durham County Council adopted the County Durham Plan on 21 October 2020. The plan incorporates strategic policies on minerals extraction and strategic mineral site allocations. A complimentary Minerals and Waste Policies and Allocations document is now under preparation to contain detailed development management policies for minerals and potentially non-strategic mineral site allocations. Early engagement work on this document commenced in January 2021 and a draft document was published for consultation in September 2021. Publication of the plan is expected in 2022.
- **Gateshead Council** adopted a Joint Core Strategy and Urban Core Plan document in March 2015 and an allocations and development management policies document

titled 'Making Spaces for Growing Places' on 1 February 2021. The latter document includes policies for minerals development and a policy to safeguard the wharf on the River Tyne at Gateshead. Work is now starting to review the Joint Core Strategy with Newcastle City Council.

- Newcastle City Council adopted a Joint Core Strategy and Urban Core Plan document in March 2015 and the Development and Allocations Plan on 24 June 2020. Work is now starting to review the Joint Core Strategy with Gateshead Council.
- North Tyneside Council adopted a Local Plan in July 2017. The plan includes a strategic minerals policy.
- Northumberland County Council is currently preparing a Local Plan. This was submitted to the Secretary of State for Communities and Local Government for independent examination on 29 May 2019. The examination hearings have been held in a number of phases with those on the minerals matters being held in February 2020 and a Main Modifications were published for consultation in June 2021.
- Northumberland National Park Authority adopted a new Local Plan in July 2020.
 This supersedes the Core Strategy and Development Policies document that was
 adopted in March 2009. The Local Plan includes a policy for minerals development
 and a policy for mineral safeguarding.
- South Tyneside Council adopted a Core Strategy in June 2007, a document containing criteria-based policies for development management in December 2011 and a Site Allocations document in April 2012. Work is underway to review these documents as part of Local Plan document. A draft Local Plan was published for consultation in August 2019.
- Sunderland City Council adopted a Core Strategy and Development Plan document, which includes strategic policies, allocations and development management policies, on 30 January 2020. A draft allocations and designations document was published for consultation on 18 December 2020.

Aggregates sites and planning applications in North East England

Aggregates sites

A list of quarries and wharves producing primary aggregates in North East England are detailed in Table 7. A map showing the location and geographical distribution of these sites in North England is provided in Figure 2.

There were 36 quarries in North East England in 2020. 26 of these were active (i.e. they were in production for some time during 2020) and 10 were inactive (i.e. they had valid planning permissions and contained permitted reserves but were not in production during 2020). Primary aggregates are produced at these sites from Carboniferous limestone, dolerite, fluvial and glacial sand and gravel, magnesian limestone and Permian sand.

There are eight wharves in North East England. The wharves are located at the Port of Blyth in Northumberland, on the River Tyne and on the River Tees. Marine sand and gravel is landed at these sites. Crushed rock imported from Norway and Scotland is also landed at wharves in North East England.

Table 7 Aggregates sites in North East England

Mineral Planning Authority	Site Name	Type of Site	Operator	Grid Reference	Mineral	Status
Durham County Council	Bishop Middleham Quarry	Quarry	Thompsons of Prudhoe	NZ 328 326	Magnesian limestone	Active
	Broadwood Quarry	Quarry	Breedon	NZ 035 365	Carboniferous limestone	Active
	Cornforth Quarry	Quarry	Tarmac	NZ 324 343	Magnesian limestone	Inactive
	Crime Rigg Quarry	Quarry	Breedon	NZ 346 416	Magnesian limestone and Permian sand	Active
	Force Garth Quarry (Middleton)	Quarry	Breedon	NY 872 282	Dolerite	Active
	Heights Quarry	Quarry	Aggregate Industries	NY 925 388	Carboniferous limestone	Active
	Hulands Quarry	Quarry	Aggregate Industries	NZ 016 140	Carboniferous limestone	Active
	Hummerbeck Quarry	Quarry	Hall Construction Services	NZ 194 259	Sand and gravel	Inactive
	Kilmond Wood Quarry	Quarry	Kearton Farms	NZ 024 134	Carboniferous limestone	Active
	Low Harperley Quarry	Quarry	Breedon	NZ 112 356	Sand and gravel	Active

North East England Aggregates Working Party

Mineral Planning Authority	Site Name	Type of Site	Operator	Grid Reference	Mineral	Status
	Quarrington Quarry	Quarry	Tarmac	NZ 330 380	Magnesian limestone and Permian sand	Active
	Raisby Quarry	Quarry	Breedon	NZ 347 352	Magnesian limestone	Active
	Running Waters Quarry	Quarry	Breedon	NZ 334 403	Magnesian limestone	Inactive
	Thrislington Quarry (West)	Quarry	Tarmac	NZ 314 331	Magnesian limestone and Permian sand	Active
	Thrislington East Quarry	Quarry	Tarmac	NZ 327 336	Magnesian limestone and Permian sand	Active
	Witch Hill Quarry	Quarry	Breedon	NZ 345 397	Magnesian limestone	Inactive
Gateshead Council	Gateshead Wharf	Wharf	Tarmac	NZ 265 638	Sand and gravel	Inactive
Hartlepool Borough Council	Hart Quarry	Quarry	Breedon	NZ 475 343	Magnesian limestone	Active
Middlesbrough Borough Council	Cochranes Wharf	Wharf	Tarmac	NZ 509 202	Sand and gravel	Active
North Tyneside Council	Howdon Jetty	Wharf	Tarmac	NZ 335 661	Sand and gravel	Inactive
	Whitehill Point Wharf	Wharf	Northumbrian Roads	NZ 346 662	Igneous Rock	Active
Northumberland County Council	Barrasford Quarry	Quarry	Tarmac	NZ 913 743	Dolerite and Carboniferous limestone	Active
	Belford Quarry	Quarry	Tarmac	NU 130 342	Dolerite	Inactive
	Cocklaw Quarry	Quarry	Tynedale Roadstone	NY 931 701	Carboniferous limestone	Inactive
	Cragmill Quarry	Quarry	Breedon	NU 109 346	Dolerite	Active
	Divethill Quarry	Quarry	Breedon	NY 980 789	Dolerite	Active
	Ebchester Quarry (Broadoak)	Quarry	Tarmac	NZ 101 569	Sand and gravel	Inactive
	Haughton Strother Quarry	Quarry	Thompsons of Prudhoe	NY 897 740	Sand and gravel	Active
	Hemscott Hill Beach	Quarry	W Bell	NZ 282 952	Sand	Inactive
	Howick Quarry	Quarry	Tarmac	NU 236 168	Dolerite	Active

North East England Aggregates Working Party

Mineral Planning Authority	Site Name	Type of Site	Operator	Grid Reference	Mineral	Status
	Keepershield Quarry	Quarry	Hanson Aggregates	NY 894 727	Dolerite and Carboniferous limestone	Active
	Lanton (Cheviot) Quarry	Quarry	Tarmac	NT 954 311	Sand and gravel	Active
	Longhoughton Quarry	Quarry	K W Purvis	NU 232 153	Dolerite and Carboniferous limestone	Active
	Merryshields Quarry	Quarry	Thompsons of Prudhoe	NZ 064 618	Sand and gravel	Active
	Mootlaw Quarry	Quarry	North Tyne Roadstone	NZ 022 750	Carboniferous limestone	Inactive
	Port of Blyth - Battleship Wharf	Wharf	Breedon	NZ 309 827	Sand and gravel	Active
	Swinburne Quarry	Quarry	Hanson Aggregates	NY 948 765	Dolerite	Inactive
	Wooperton Quarry	Quarry	North East Concrete	NU 049 205	Sand and gravel	Active
Northumberland National Park Authority	Harden Quarry	Quarry	Tarmac	NT 959 086	Mica-porphyrite	Active
Redcar and Cleveland Borough Council	Tees Wharf	Wharf	Shire Aggregates	NZ 526 216	Sand and gravel	Active
Ü	Teesport	Wharf	Aggregate Industries	NZ 551 226	Igneous rock	Active
South Tyneside Council	Marsden Quarry	Quarry	O'Brien Aggregate Marsden	NZ 406 642	Magnesian limestone	Active
Sunderland City Council	Eppleton Quarry	Quarry	Eppleton Quarry Products	NZ 362 484	Magnesian limestone and Permian sand	Active
Stockton on Tees Borough Council	Able Wharf	Wharf	CEMEX	NZ 526 216	Sand and gravel	Inactive

Planning Applications

The North East England Aggregates Working Party monitors the nature and outcome of planning applications for primary aggregates extraction in North East England on an annual basis. Table 8 summarises the planning applications submitted during 2020 and decisions on planning applications in 2020.

During 2020 there were no relevant planning decisions but there were a number of applications that were submitted and/or were pending determination at 31 December 2020. The applications pending determination involve potential additional reserves 17,950,000 tonnes of crushed rock for aggregates uses and 550,000 tonnes of sand and gravel for aggregates used that currently do not have a valid planning permission for extraction.

Table 8 Planning Applications and Decisions in North East England

Mineral Planning Authority	Site Name and Location (Grid Reference)	Operator / Applicant	Tonnage (for aggregate use)	Type of Application	Date Submitted	Decision
Durham County Council	Hawthorn Quarry Seaham (NZ 435 464)	Tarmac	4,000,000 (Limestone)	Determination of modern conditions for a dormant site	10 May 2000	Pending at 31 December 2020
	Harrow and Ashy Bank Quarry Eastgate (NY 956 395)	Tarmac	3,750,000 (Limestone)	Determination of modern conditions for a dormant site	24 May 2007	Pending at 31 December 2020
	Tuthill Quarry Haswell (NZ 390 424)	Owen Pugh	2,500,000 (Limestone)	New site	08 February 2017	Pending at 31 December 2020
Gateshead Council	Crawcrook Quarry Crawcrook (NZ 138 637)	SITA and CEMEX	550,000 (Sand and gravel)	Extension	26 September 1997	Pending at 31 December 2020
Northumberland County Council	Divethill Quarry Great Bavington (NY 980 789)	Breedon	2,700,000 (Dolerite)	Extension	30 October 2020	Pending at 31 December 2020
	Shiel Dykes Quarry Newton on the Moor (NU 149 071)	North East Concrete	5,000,000 (Dolerite)	New site	07 September 2020	Pending at 31 December 2020

7. Local Aggregate Assessments

Mineral Planning Authorities are required to prepare an annual Local Aggregate Assessment based on a rolling average of 10 years' sales data and other relevant local information, and an assessment of all supply options.

In North East England, the Mineral Planning Authorities in County Durham, Northumberland and Tyne and Wear have worked together to produce a Joint Local Aggregate Assessment and the five Tees Valley authorities have also worked together to produce a Joint Tees Valley Local Aggregate Assessment.

For the Mineral Planning Authorities in County Durham, Northumberland and Tyne and Wear, the suggested provision has been based on a three year sales average over the period 2017 to 2019 recognising the increase in demand in recent years compared to the period pre-2013 and the impact of the restrictions to control the Covid-19 pandemic on sales in 2020. In Tees Valley the level of provision is as set out in the Tees Valley Joint Minerals and Waste Core Strategy (adopted September 2011).

Table 9 Local Aggregate Assessments in North East England

Mineral Planning	LAA Date	LAA Figure (tonnes		Calculation
Authority		Sand and Gravel	Crushed Rock	Method
Durham	November 2021 (updated with 2019 and 2020 data)	438,000	3,125,000	Three year sales average (2017 to 2019)
Northumberland County and Northumberland National Park	November 2021 (updated with 2019 and 2020 data)	356,000	1,717,000	Three year sales average (2017 to 2019)
Darlington, Hartlepool, Middlesbrough, Redcar and Cleveland, and Stockton on Tees	November 2018 (2017 data)	175,000	187,500	Provision in Tees Valley Joint Minerals and Waste Core Strategy (Adopted September 2011)
Gateshead, Newcastle, North Tyneside, South Tyneside, and Sunderland	November 2021 (updated with 2019 and 2020 data)	240,000	467,000	Three year sales average (2017 to 2019)

Local and National Aggregate Need

For North East England, the annual rates of provision for aggregates detailed in the relevant Local Aggregate Assessments are 5.5 million tonnes of crushed rock each year and 1.18 million tonnes of sand and gravel each year.

When compared with the ten year sales averages, the combined provision in the Local Aggregates Assessments has been found to exceed the sales average for both crushed rock and sand and gravel. For crushed rock the provision would exceed the ten year sales average by 19.4% and 24.4% for sand and gravel.

When compared with the published sub-national guidelines for North East England, the combined provision in the LAAs is 23.8% below the guideline for sand and gravel and 11.8% below the guideline for crushed rock. However, the North East England Aggregates Working Party considers that the current national and sub-national guidelines for aggregates provision are now out-of-date and do not represent a robust basis for assessing whether North East England and its Mineral Planning Authorities are making an appropriate contribution to local and wider needs. The North East England Aggregates Working Party additionally considers that there is a need to review and update the national and sub-national guidelines.

On this basis the North East England Aggregates Working Party considers that the annual rates of provision for aggregates detailed in the Local Aggregate Assessments provide for an appropriate contribution to local and wider needs to ensure a steady and adequate supply of these materials. There is no evidence to suggest that there is an undue reliance on other areas to meet demand from within North East England. The Aggregate Minerals Survey 2019 reported sales of 7.3 million tonnes of primary aggregates from North East England in 2019 compared with apparent consumption of 7.5 million tonnes. Notwithstanding this it is recognised that there may be supply issues at a mineral planning authority level in future years as permitted reserves are worked out and existing planning permissions expire in particular areas. In addition, the North East England Aggregates Working Party recognises that there may be a greater demand to supply other areas in the north of England due to supply shortfalls in neighbouring areas placing an increased demand on primary aggregates from North East England. It is therefore important to ensure that there are appropriate levels of permitted reserves and productive capacity to maintain supply in order to meet both local and national needs.

8. Trends and Analysis

Primary aggregates sales

Sales of primary aggregates from quarries and wharves in North East England in 2020 were lower than the sales recorded during 2019. The decrease in sales from 2019 to 2020 is considered to be a result of the restrictions to control the Coronavirus pandemic in 2020, which led construction sites and some operational quarries temporarily closing for a period from March 2020.

Prior to 2020, sales of primary aggregates from sites in North East England had generally been increasing over the period since 2011 when lower sales were recorded due to the 2007 economic downturn and a resulting reduction in demand for construction aggregates. Over that period, for example, sales of primary aggregates from quarries in North East England increased by 42.9% from 2011 (4.3 million tonnes) to 2019 (6.7 million tonnes) reflecting growth in construction activity over the period following the economic downturn.

At a local level, sales for crushed rock and sand and gravel have generally followed the pattern of sales observed across North East England as a whole, with the three year sales averages being above the ten year average reflecting this increase in sales. However, in respect to sand and gravel sales from quarries, the three year sales average from Northumberland is below the ten year sales average reflecting a decrease in sales after 2017. It is considered that this reflects a reduction in the number of operational sites in Northumberland over this period and sites beginning to work out their permitted reserves. In County Durham, there has been a notable increase in sand and gravel sales from quarries this area over the ten year period and since 2016 and 2017 (330,000 tonnes in 2017 compared with 625,000 tonnes in 2019). This increase is principally due to production at Low Harperley Quarry commencing form 2017 onwards and increased production of sand at Quarrington Quarry in recent monitoring periods.

Sales of marine dredged sand and gravel from wharves in North East England have similarly increased over the ten year period, but sales have not increased at the same levels as those from the quarries. This is considered to be due previously active wharves currently being inactive.

Imports of crushed rock by sea continue to make a small contribution to overall sales of crushed rock for aggregate uses from North East England. While the contribution is relatively small compared to overall sales, it provides a supply of materials for uses such as roadstone to sites in the Tyne and Wear conurbation, for example, where number of quarries and the availability of the resource is more limited.

Primary aggregate reserves

In North East England reserves of sand and gravel for aggregate uses decreased from 16.8 million tonnes in 2019 to 15.3 million tonnes at 31 December 2020. This decrease in permitted reserves was as a result of sales, no new planning permissions being granted in 2020, and a reassessment of reserves at a quarry in Northumberland by the operator. At 31 December 2020, Durham had permitted sand and gravel reserves of 5.2 million tonnes,

which represents a landbank of 12.0 years, and Northumberland had permitted reserves of 4.6 million tonnes, which represents a landbank of 12.9 years. There are no permitted reserves of sand and gravel within the Tees Valley area and the permitted reserves within Tyne and Wear are contained in a single site in Sunderland. For North East England as a whole the 15.3 million tonnes of permitted reserves of sand and gravel represent a landbank of 12.9 years.

Reserves of crushed rock for aggregate uses in North East England decreased from 198.0 million tonnes in 2019 to 195.3 million tonnes in 2020. This decrease in permitted reserves was as a result of sales and no new planning permissions being granted in 2020. At 31 December 2020, Durham had permitted reserves of 109.7 million tonnes of sand and gravel, which represents a landbank of 35.1 years, and Northumberland had permitted reserves of 78.7 million tonnes, which represents a landbank of 45.8 years. Permitted reserves of crushed rock within the Tees Valley area are contained in a single site in Hartlepool and the permitted reserves within Tyne and Wear are contained in two sites (one in South Tyneside and one in Sunderland).

For both sand and gravel and crushed rock, the permitted reserves recorded in 2020 were the lowest in the last ten monitoring periods and reflect a pattern of decreasing reserves in North East England since 2015. This is largely due to a combination of sales being at a greater rate than new reserves have been granted planning permission over this period and some downward reassessment of reserves by some site operators.

Secondary and recycled aggregates

In 2020 it is estimated that fixed construction and demolition recycling facilities and secondary aggregates producers contributed 841,300 tonnes of recycled and secondary aggregate to supply from North East England. Sources of recycled and secondary aggregates included construction, demolition and excavation wastes, recovered road planings, and ash from the Haverton Hill Energy from Waste Plant on Teesside.

This recycled and secondary aggregates sales figure should be treated with some degree of caution as not all producers in North East England responded to the survey and the figures include a large number estimates of production from some sites derived from the Environment Agency Waste Data Interrogator. In addition, the survey does not include mobile crushers and screens which are known to make a significant contribution in terms of the quantities of construction and demolition waste recycled for aggregate uses.

Major Construction Projects or Developments

Major construction projects and significant developments that could have a significant influence on demand for construction aggregates are detailed in Table 10.

The projects or developments that were taking place from 2014 onwards have contributed to the overall increase in sales when compared to sales in 2013. The scale of the ongoing and future projects identified in Table 10 are considered to be of a similar scale to projects that have taken place during the previous ten year period and in turn are considered to have a similar demand to that experienced over that period. Projects such as the A1 dualling in Northumberland and the A66 dualling in North Yorkshire, County Durham and Cumbria are likely to result in increased supply from quarries in the north of Northumberland and the south of County Durham respectively during construction.

Table 10 Major Construction Projects or Developments

Project/Development Name and Location	Time Scale (estimated start and end date)	Comments
A1 upgrade at Lobley Hill Gateshead	Construction commenced in summer 2014 and was completed in summer 2016.	Widening of existing dual carriageway to three lanes in each direction and upgrade of two junctions to include new parallel road links between the junctions.
Morpeth Northern Bypass Northumberland	Construction commenced in spring 2015 and was completed in April 2017.	3.8km of new single carriageway road
A1 Leeming to Barton North Yorkshire	Construction commenced in 2014 and completed in 2018.	12 mile section of dual carriageway with a new three lane motorway
A19 Silverlink junction improvements North Tyneside	Construction commenced in 2016 and completed in March 2019.	
International Advanced Manufacturing Park (IAMP) Sunderland and South Tyneside	Phase One underway	
A19 Testos and Downhill junction improvements South Tyneside	Construction commenced in Spring 2019 and due for completion in early 2022.	
Potash Harbour Facilities Redcar and Cleveland	Consent granted. Construction commenced in 2019.	
A1 Morpeth to Ellingham dualling Northumberland	Construction could start in 2022 if Development Consent Order granted.	Development Consent Order application submitted July 2020.

North East England Aggregates Working Party

Project/Development Name and Location	Time Scale (estimated start and end date)	Comments
A66 dualling County Durham, Cumbria and North Yorkshire,	Construction to start in 2024/25.	Development Consent Order application is expected to be submitted in Spring 2022.
A1 Birtley to Coal House widening Gateshead	Commenced - Summer 2021. End date - 2025	Widening of A1 to provide three lane carriageway and replacement of a railway bridge.
A1 Brunton to Scotswood widening Newcastle upon Tyne	Commenced - March 2020. End date - 2023	Widening of A1 within existing carriageway to provide three lanes
A19 Norton to Wynyard widening Stockton on Tees	Work commenced in March 2020 and is due to be completed in 2022.	Widening of existing dual carriageway to provide three lanes in each direction.
Teesside Combined Cycle Power Plant Redcar and Cleveland	Development Consent Order granted 5 April 2019.	
British Volt Gigafactory Northumberland	Planning permission granted July 2021. Construction to commence in 2021. Phase 1 to be complete in 2023, Phase 2 in 2025 and Phase 3 in 2028.	Battery manufacturing plant covering a 92.2 hectare site with a main building of 256,000 square metres.

Key Conclusions

The North East England Aggregates Working Party considers that the Local Aggregates Assessments are making an appropriate contribution to local and wider needs to ensure a steady and adequate supply of these materials.

At 31 December 2020, the reserves of crushed rock and land-won sand and gravel for aggregates uses for North East England as a whole were above the minimum landbank indicators of ten years and seven years respectively.

Notwithstanding the above, it is recognised there may be supply issues at a mineral planning authority level in future years as permitted reserves are worked out and existing planning permissions expire. It is therefore important to ensure that there are appropriate levels of permitted reserves and productive capacity to maintain supply in order to meet both local and national needs.

A range of planned infrastructure and significant construction projects in North East England that could influence demand for aggregates have been identified. It is considered that, while these developments could have an influence upon demand for materials locally, they are not nationally significant in terms of their influence on demand.

Appendix 1: AWP Meetings

Table 11 North East England AWP Meetings

	East England AWP Me	
Meeting Date	Link to minutes of the	Summary of Key Points
12 November 2021	meeting	Undata form DLULIC on abongo to department
12 November 2021	Link to meeting notes - 12/11/2021	Update form DLUHC on change to department name and the new Secretary of State, work relating to planning reform and national guidelines for aggregates provision.
		Annual Report (containing sales and reserves data for 2020) discussed and steps to finalise and publish agreed.
		Local Aggregate Assessments – Joint Local Aggregate Assessment for County Durham, Northumberland and Tyne and Wear discussed and steps to provide feedback agreed. No Local Aggregate Assessment had been submitted by the five Tees Valley authorities at the time of the meeting.
		Permitted reserves – Discussion about when reserves should be included in the landbank. It was agreed the reserves should be included in the landbank following the grant of planning permission in circumstances where other permits may required before extraction can take place.
		Sales levels – Industry have observed strong sales level in 2021. Concerns that some nationally significant projects are resulting in a demand for resources that is impacting on availability to supply local projects.
8 July 2021	Link to meeting notes - 08/07/2021	Agreed that Claire Teasdale should continue as Chair until at least 31 March 2025
		Changes to the AWP secretariat contracts were discussed, including changes to timelines, format of the annual report and national terms of reference. Changes aim to bring consistency across the AWPs and make comparisons between data easier.
		Update form MHCLG on work relating to planning reform/Planning White Paper and national guidelines for aggregates provision.
		National Terms of Reference – Discussed and comments collated. Agreed there was no need to add any locally specific specifications as the matters could be sufficiently covered by the National Terms of Reference.
		Draft collated sales and reserves data from the 2020 survey shared. Agreed to circulate Draft

Meeting Date	Link to minutes of the meeting	Summary of Key Points
		Annual Report at next meeting.
		Local Aggregate Assessments – Key dates for drafting and submission to the AWP discussed and agreed.
		Impact of Clean Air Zones on viability of operational minerals sites where located within these areas.
4 December 2020	Link to meeting notes – 04/12/2020	Update provided on progress with the Aggregate Minerals Survey 2019.
		Planning for the Future – White Paper Consultation discussed by members, including the lack of reference to minerals planning in the document.
		Need for new national and sub-national guidelines for aggregates provision discussed.
		Joint LAA for County Durham, Northumberland and Tyne and Wear based on sales data for 2018 discussed.
		Agreed that future meetings of the North East England AWP should take place at least twice each year.
19 November 2019	Link to meeting notes - 19/11/2019	Arrangements for the national Aggregate Minerals Survey 2019 and the project steering group.
		The National and Sub-National Guidelines for Aggregates Provision were discussed. It was considered that there is a need for work to be undertaken to update these to ensure they are upto-date and fit for purpose.
		Annual Report (containing 2018 sales and reserves data) agreed.
		Update on progress with Local Aggregates Assessments.
		Findings of the Mineral Products Association's Annual Mineral Survey were presented and discussed.
		Dewatering consent regime – Potential impact for the availability of permitted reserves discussed.

Appendix 2: Sales and Reserves of Primary Aggregates by Resource and End Use

The tables below provide a breakdown of primary aggregates sales and by resource and end use.

These end-use figures should be treated with some degree of caution as, although operators know what products they sell, they cannot always be certain what the products will ultimately be used for.

Table 12 Crushed rock sales from quarries in North East England by resource and end use

End Use	Carboniferous limestone	Magnesian limestone	Igneous rock	Total crushed rock for aggregate use
Coated roadstone	97,264	0	222,174	319,438
Roadstone to be coated	0	33,175	204,691	237,886
Uncoated roadstone (Type 1 and 2)	13,415	768,283	239,899	1,021,597
Uncoated roadstone (surface chippings)	0	5,221	11,110	16,331
Railway ballast	0	0	6,021	6,021
Concrete aggregate	253,313	257,407	174,405	685,125
Other screened/graded	178,822	417,849	509,237	1,105,908
Armour and gabion stone	43,588	2,060	1,945	47,593
Other constructional use	58,760	856,088	354,402	1,269,250
Unknown end use	0	0	239,904	239,904
Total sales for aggregate use	645,162	2,340,083	1,963,788	4,949,033
Notes:				

Notes:

Figures in tonnes.

Table 13 Crushed rock reserves at quarries in North East England by resource and end use

	Carboniferous limestone	Magnesian limestone	Igneous rock	Total crushed rock
Reserves for aggregate uses	21,614,500	86,432,504	87,301,169	195,348,173
Notes: Figures in tonnes.				

Table 14 Sand and gravel sales from quarries in North East England by end use

End Use	Sales from Quarries (tonnes)	Sales from Wharves (tonnes)
Sand for asphalt	74,339	0
Sand for use in mortar	410,853	12,884
Sand for concreting or sharp sand	375,521	428,282
Gravel for asphalt	0	0
Gravel for concrete aggregate	19,482	0
Other screened and graded gravel	88,829	19,532
Other sand and gravel (e.g. for fill)	25,366	802
Sand/gravel with unknown end use	0	120,000
Total for aggregate use	994,390	581,500

Appendix 3: Crown Estate Landings Statistics

The Crown Estate publishes annual statistics relating to the dredging of marine minerals and landings of dredged materials. The table below presents information on the tonnages of marine dredged sand and gravel landed at locations in North East England.

These statistics refer to sand and gravel removed under licence from The Crown Estate Commissioners and relate to royalty returns for the relevant calendar year. Removals from areas not in The Crown Estate ownership are not included in these statistics. The figures relate to landings and differ from the sales reported elsewhere in this report as landings within a given period at a wharf do not necessarily equate to sales for aggregate uses in that same period.

In 2020 the marine dredged sand and gravel delivered to landing locations in North East England was sourced from licenced dredging areas in the Humber dredging region off the coast of Yorkshire, Lincolnshire and North Norfolk.

Table 15 Marine dredged aggregate landed at wharves in North East England

	Port of Blyth	River Tees wharves	River Tyne wharves	Total landings in North East England
2010	-	257,062	362,223	619,285
2011	4,046	181,346	247,407	432,799
2012	11,156	99,452	337,173	447,871
2013	27,489	133,711	265,293	426,493
2014	22,946	198,710	292,646	514,302
2015	37,452	245,860	287,018	570,330
2016	29,904	215,142	312,469	557,515
2017	37,406	297,387	296,624	631,417
2018	11,012	281,908	288,992	581,912
2019	18,045	354,643	258,081	630,769
2020	-	291,416	268,655	560,071

Source: The Crown Estate

Notes:

Figures in tonnes.

Figures are for landings and not sales so differ from the figures for sales presented in Table 1 and 2. These statistics refer to sand and gravel removed under licence from The Crown Estate Commissioners and relate to royalty returns for the relevant calendar year. Removals from areas not in The Crown Estate ownership are not included in these statistics.

Appendix 4: North East England AWP Membership

Chair:

Claire Teasdale, Durham County Council

Technical secretary:

Kevin Tipple, Northumberland County Council

Central Government:

Department for Levelling Up, Housing and Communities

Mineral Planning Authorities:

Darlington Borough Council
Durham County Council
Gateshead Council
Hartlepool Borough Council
Middlesbrough Borough Council
Newcastle City Council
North Tyneside Council
Northumberland County Council
Northumberland National Park Authority
Redcar and Cleveland Borough Council
South Tyneside Council
Sunderland City Council
Stockton on Tees Borough Council

Aggregates industry:

Aggregates Industries UK
Breedon
British Aggregates Association
CEMEX UK
Hanson Aggregates
Mineral Products Association
Tarmac

Other:

The Crown Estate

*As at 31 December 2021